

Office of Biomass Programs

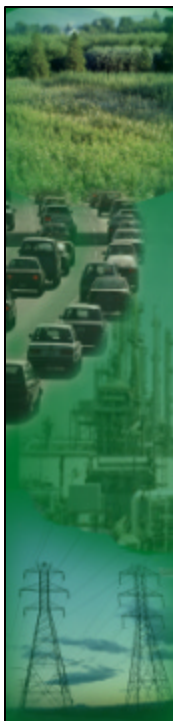


Hawaii Ethanol Workshop

Honolulu, Hawaii

November 14, 2002

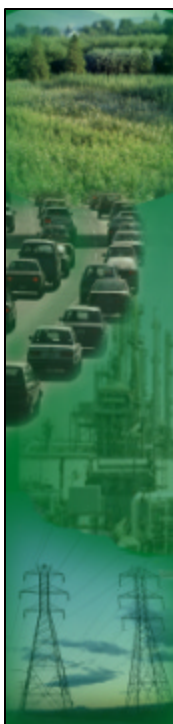
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Topics

- Background
- Program Mission and Goals
- Office of Biomass Programs R&D Focus Areas
- Opportunities

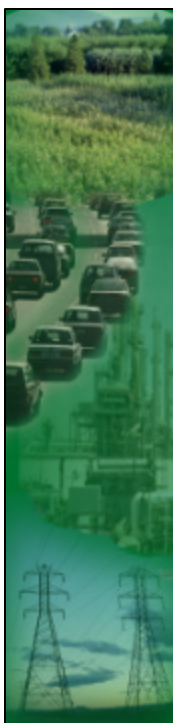
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Background Petroleum Production – 2001

- Net crude imports totaled 9.3 Mil. Bbl/day
 - 4.8 Mil. Bbl/day imported from OPEC nations
- Net U.S. Production totaled 5.8 Mil. Bbl/day

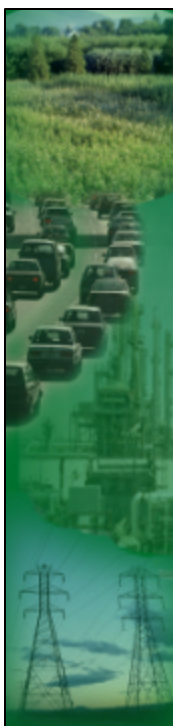
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Background (cont.) Petroleum Consumption – 2001

- Imports are a large and growing share of U.S. petroleum consumption
 - 19.6 Mil. Bbl/day consumption
 - 10.9 Mil. Bbl/day net imports
 - 25% of these imports come from OPEC nations
- Petroleum product consumption in the transportation sector was approx. 14.9 Mil. Bbl/day
 - Motor gasoline: 8.61 Mil. Bbl/day

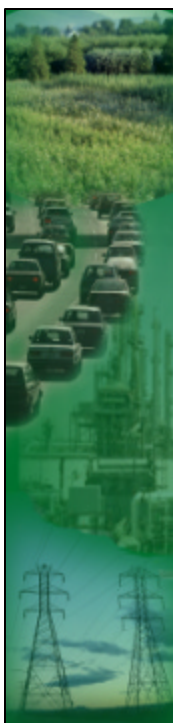
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Background (cont.) Ethanol Production - 2001

- 1.77 billion gallons of ethanol were produced in the U.S.
- 2002 estimates exceed 2 billion gallons
- 90% ethanol produced from the starch portion of the corn kernel

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Program Goals

Goals

- Reduce U.S. dependence upon foreign sources of petroleum
- Support development of Industrial Biorefinery

The term 'biorefinery' means equipment and processes that:

- Convert biomass into fuels and chemicals; and
- May produce electricity

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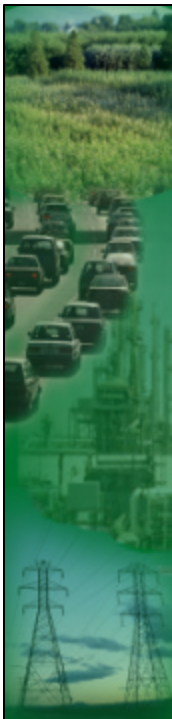


Program Mission

Mission

- To foster research and development on advanced technologies to transform our abundant biomass resources into clean, affordable, and domestically-produced biofuels, biopower, and high-value bioproducts for improving the economic development and enhancing the energy supply options of the U.S.

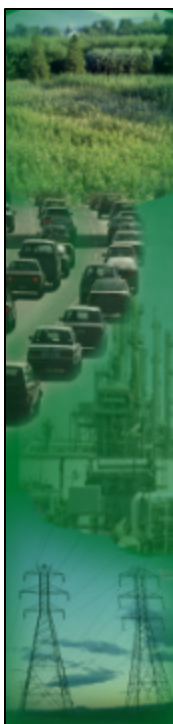
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Biomass R&D is a National Priority

- The Biomass R&D Act of 2000 directs DOE and USDA to enhance and coordinate biomass R&D efforts.
- The Energy Title (Title IX) of the new Farm Bill provides supports for increased use of biomass energy and products and for R&D.
- Various pieces of legislation debated in Congress to provide energy tax incentives, funding for R&D, and other forms of tax relief

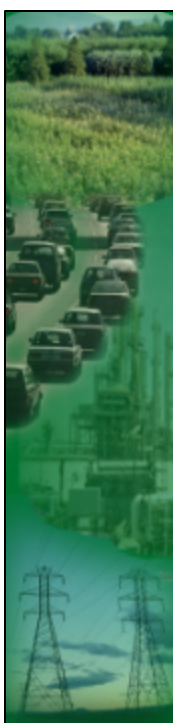
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Opportunities

- On the horizon
 - Develop and integrate bioproducts to enable deployment of biofuels
 - Develop strong partnerships with industry leaders committed to technology deployment
 - Coordinate with USDA
 - Provide Americans with a stronger economy, healthier environment, and more secure future

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- More Information:

www.ott.doe.gov/biofuels

www.afdc.doe.gov

www.ccities.doe.gov

www.eren.doe.gov

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